



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Memorandum

January 4, 2010

CONSTRUCTION MEMORANDUM 10-01

TO: District Deputy Commissioners
Technical Services Directors
District Construction Directors
District Testing Engineers
District Area Engineers
Project Engineers/Supervisors
Office of Materials Management
Office of Project Management
District Project Management Personnel

FROM: Mark A. Miller, Director *Mark Miller*
Division of Construction Management

SUBJECT: New Change Order Policy

SUPERSEDES: Construction Memorandum 06-18

The new Change Order Policy has been approved by the Executive Office and is attached to this memo. Instructions related to the new policy will be included in the January 2010 edition of the Interim General Instructions to Field Employees.

The new policy includes the following changes:

- The PE/S now has approval authority for both monetary and time adjustments.
- The Director, Division of Construction Management must approve Change Orders which add or delete closure periods or intermediate completion dates.
- Time adjustment approval authority is no longer cumulative throughout the duration of the contract. The approval authority for time adjustments depends on the adjustment duration included in each individual Change Order.
- There is no longer any need to categorize time adjustments as Standard Specification or special provision related adjustments.
- A new document known as a Work Order has been developed to authorize Contractors to perform work associated with a Change Order prior to execution of the actual Change Order document.

Although the PE/S now has monetary and time adjustment approval authority, it is still the intent of the Department for a PE/S to work closely with the AE, including providing notification for all situations which require resolution by Change Order.

Requiring approval of Change Orders that include addition or deletion of closure periods or intermediate completion dates by the Director, Division of Construction Management is intended to provide statewide uniformity for these situations and permits the Division of Construction Management to monitor how often these additions and deletions occur.

The intent of removing the cumulative nature of time adjustment approval authority is to allow for quicker approval of small adjustments. It remains the intent of the Department to approve additional contract time as soon as possible after determination of Department responsibility for a delay is made.

In a similar vein, the Work Order concept has been developed to direct Contractors to perform work associated with a Change Order as soon as possible after documented approval is obtained from all required approval authorities and allows the Contractor to perform this work prior to the complete execution of the Change Order document. A sample Work Order document is included in the instructions which will be included in the January 2010 edition of the Interim GIFE. Processing the Change Order document for approval must remain a high priority for all involved in the approval chain of command as Contractors cannot be paid for work associated with new pay items until the Change Order document is fully executed.

If District personnel have any questions regarding the new Change Order Policy or the instructions in the January 2010 edition of the Interim GIFE, please contact the Division of Construction Management Field Engineer assigned to your District.

Attachment: Policy for Change Orders on Construction Contracts

MAM:jgj

INDIANA DEPARTMENT OF TRANSPORTATION
Departmental Policy

Policy: **Policy for Change Orders on Construction Contracts**

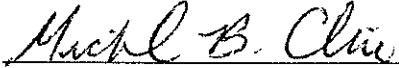
Purpose: The purpose of this Policy is to formalize the requirements related to Change Orders on Construction Contracts.

Effective Date: **January 1, 2010**

Supersedes: This Policy supersedes the previously published Construction Change Order and Time Extension Policies issued with Construction Memorandum 06-18.

Responsible Division: Division of Construction Management

Authority:

 Date 12-17-09
Michael B. Cline
Deputy Commissioner of Operations

POLICY

1. General Provisions

- 1.1. Change Orders are utilized to document an impact to a Construction Contract and authorize the changes required to mitigate the impact.
- 1.2. It is the responsibility of the Division of Construction Management to maintain a Construction Change Order Policy (Policy) that minimizes risk to the Department from impacts to Construction Contracts and documents the reasons for changes in order to manage process improvement.
- 1.3. It is the responsibility of the Division of Construction Management to maintain procedural instructions for application of the Policy.
- 1.4. This Policy is implemented in conjunction with the applicable provisions of the Standard Specifications. The Policy is not to be construed to supersede the Standard Specifications or any State or Federal statute.
- 1.5. A Change Order is required to document changes to the Contract. These changes include, but are not limited to, monetary adjustments, time adjustments, plan revisions, and specification changes.

- 1.6. Each Change Order is to only address one specific impact to a Contract and clearly identify the reason for the change. Multiple items may be included on a Change Order, but all are to be related to the same specific impact and are to indicate the same reason for the change.
- 1.7. Change Orders are classified as either Discretionary or Non-Discretionary.
- 1.8. Change Orders require authorization by the appropriate authority prior to proceeding with any change to the Contract.
- 1.9. When a Change Order includes both monetary and time adjustments, the appropriate approval authority is the higher authority required when considering the monetary and time adjustments separately.
- 1.10. Change Orders are not to be split into multiple documents to reduce the approval authority level required.
- 1.11. The District Construction Office will provide for notification to be sent to the Project Manager (PM) when a Change Order is being drafted.
- 1.12. Change Orders on Contracts with Federal Highway Administration (FHWA) oversight require documented FHWA approval prior to proceeding with any change to the Contract.
- 1.13. Change Orders on Local Public Agency (LPA) Contracts require documented approval from the LPA prior to proceeding with any change to the Contract.
- 1.14. A Change Order is not to be used to purchase any equipment intended to remain the property of the State without documented approval from the Director of the Division of Construction Management (DDCM) prior to proceeding with any change to the Contract.
- 1.15. A Change Order is not to be used to authorize a Contractor to perform work on State property such as buildings, vehicles, equipment, or other items not included in the Contract without documented approval from the DDCM prior to proceeding with the work.
- 1.16. A Change Order will include documentation necessary to describe the impact to the contract and the justification for the change. The documentation is to be of sufficient detail that a person generally familiar with the construction process, but not associated with the specific contract, is able to understand the impact and the justification for change.
- 1.17. Justification of new unit prices is to be documented along with the Change Order.
- 1.18. The District Construction Office will review Change Orders to ensure compliance with the Policy.

- 1.19. The State Construction Engineer in the Division of Construction Management will conduct process reviews to verify compliance with the Policy.

2. Monetary Adjustments

- 2.1. A Change Order is not required to authorize minor changes in existing Contract pay item quantities that are typically necessary to meet the scope and design of the Contract. Changes are considered minor if the total impact to the Contract is less than \$20,000.00 in increased or decreased costs compared to the current approved Contract amount. Once this limit is exceeded, a Change Order that includes all increases or decreases in existing Contract pay item quantities is required to authorize the revisions. Additional Change Orders due to further changes in existing Contract pay item quantities are not required until the \$20,000.00 limit is again exceeded.
- 2.2. The Department's level of authority for per Change Order for monetary adjustments to a Contract is as shown in the following table:

Monetary Adjustment Approval Authority	
Approval Authority	Maximum Adjustment (Positive or Negative)
Project Engineer/Supervisor	\$50,000.00
Area Engineer	\$250,000.00
District Construction Director	\$750,000.00
State Construction Engineer	\$2,000,000.00
Director, Division of Construction Management	Over \$2,000,000.00

3. Time Adjustments

- 3.1. The Department's level of authority for approval per Change Order for time adjustments to a Contract is as shown in the following table:

Time Adjustment Approval Authority	
Approval Authority	Maximum Adjustment (Positive or Negative)
Project Engineer/Supervisor	10 Days
Area Engineer	50 Days
District Construction Director	100 Days
State Construction Engineer	200 Days
Director, Division of Construction Management	Over 200 Days

- 3.2. For Change Orders which extend any combination of an Intermediate Contract Completion Date, a Closure Period or the Contract Completion Date, the appropriate approval authority is based on the longest time adjustment included in the Change Order.
- 3.3. For Change Orders which delete an Intermediate Completion Date, a Closure Period, or any other milestone date or time period from a Contract, the approval authority is the DDCM.

4. Scope or Design Change Approval

- 4.1. The approved scope or design of a Contract is not to be changed without documentation of approval from the appropriate authority, obtained through the PM, in addition to the approval authority based on the magnitude of the Change Order monetary and time adjustments. Any of the following are classified as changes to scope or design elements of the Contract:
- 4.1.1. Alterations to the intent or scope of the Contract or character of the work, including significant revision of the project limits
 - 4.1.2. Revisions to geometric design of the mainline roadway, ramps, frontage roads or crossroads
 - 4.1.3. Revisions to structural section of the pavement, including, but not limited to subgrade, subbase, PG binder grade, pavement type, pavement depth, individual pavement courses and aggregate designations
 - 4.1.4. Additions, deletions, changes or relocations to bridges or structures that affect the functional scope and intent of the approved design
 - 4.1.5. Deviations from planned access control, including drives or pedestrian access features

- 4.1.6. Revisions to the specifications, special provisions or other contract requirements, including approved provisions for maintaining traffic
- 4.1.7. Revisions that result in new environmental impacts, changes in previously permitted activities or reductions in environmental mitigation measures provided for in the Contract
- 4.1.8. When the change is due to a design error or omission, it is required that the designer be contacted through the project manager to ensure the designer has an opportunity to provide options that will mitigate the cost of the solution.

existing work, the time associated with the work should be addressed in the same change order if possible. In cases where the time associated with a change may not be immediately known, it is permissible to adjust the time on a future change order. All change orders should address contract time with one of the following statements in the explanation portion of the document:

- “A contract time adjustment is required for this change and has been addressed herein.”
- “A contract time adjustment is potentially required for this change, but cannot be quantified at this date. Any contract time adjustment required for this change will be addressed by change order at a future date.”
- “A contract time adjustment is not required for this change.”

When a contract time adjustment is not made at the same time as the change order revising the work, the future change order that addresses the time must include a reference in the explanation to the original change order that revised the associated work.

2.18.2 Time Waivers

A time waiver is typically used in order to eliminate liquidated damages after substantial completion of the work due to time allowed by 108.09 for completion of punchlist work and removal of signs. A time waiver may also be used to excuse chargeable time for any Department delay in performing the final inspection.

A time waiver is not appropriate to excuse time for additional work that is added to the contract after substantial completion. If additional contract work is added at the time of the pre-final or final inspection, then a contract time adjustment should be included in the same change order that adds the additional work.

A time waiver is to be documented on form IC 632, Completion Date and Liquidated Damages Data. If the reason for a time waiver cannot be fully explained on the IC 632, a letter is to be written by the granting authority and included with the IC 632 in the Final Construction Record.

Questions about the use and documentation of contract time adjustments and time waivers should be addressed to the appropriate Division of Construction Management Field Engineer for the district.

2.19 CHANGE ORDERS *(Rev 01-29-10)*

A Change Order is a written agreement executed by the Department and the Contractor that modifies an existing contract.

In order to allow the Department to manage Change Orders, each Change Order must accurately identify the reason for the contract modification for future reference.

2.19.1 Contract Modifications

A Change Order must be executed to document any of the following changes to a contract:

- Monetary Adjustment
- Time Adjustment
- Construction Change

Monetary adjustments may result in additional compensation for the Contractor or a credit to the Department. They may result from changes in quantities associated with existing contract pay items or the addition of new pay items to the contract.

Time adjustments may result in either increased or reduced contract time to perform work associated with closure periods, intermediate completion dates, or the contract completion date.

Construction changes typically include revised plan sheets or specifications related to a revised design or a changed condition. Construction changes may result in monetary or time adjustments.

2.19.2 Extent of Work Covered by Change Order

In order to facilitate management of Change Orders, it is necessary to limit pay items included in a Change Order to those required to mitigate a specific event. It is possible for a Change Order to include monetary adjustments, time adjustments, and construction changes as long as each Change Order component is related to the mitigation of the same event.

For example, if an unknown existing utility facility is found to be in conflict with a planned storm sewer trunk line and it is determined that the appropriate mitigation for the conflict is to split the trunk line into two smaller pipes that are installed around the utility, it is acceptable for all of the following to be included in the same Change Order:

- Monetary adjustments resulting from quantity changes for existing pay items and the addition of new pay items required to construct the revised storm sewer structures around the utility facility.
- Time adjustments to closure periods, intermediate completion dates, and the contract completion date as required for construction of the revised storm sewer facilities.
- Construction change consisting of revised plans and new specifications required to construct the revised storm sewer.

It would not be acceptable to include a monetary adjustment associated with changing the pavement marking material throughout the contract area from paint to thermoplastic on the above noted Change Order. The type of pavement marking materials is not affected by the revised storm sewer layout, so a separate Change Order would be required to document the change in pavement marking material.

2.19.3 Reason Codes

Reason codes are used to categorize Change Orders so the Department can track the cause of changes and work to minimize similar changes on future contracts.

Each Change Order requires selection of a reason code from the drop down menu within the SiteManager Change Order module. Only one reason code may be selected per Change Order. The AE and the Division of Construction Management Field Engineer assigned to the District are available for guidance regarding selection of the proper reason code for individual Change Orders.

Below is a list of the available reason codes:

Errors and Omissions	Contract Related
	Design Related
	Environmental Related
	Permits Related
	Quantity Related
	R/W Related
	Soils Related
	Staging Related
	Traffic Control Related
Scope Changes	Utility Related
	FHWA
	Central Office
	District/Subdistrict
	District Construction Engineer
	Area Engineer
	PE/S
	Traffic Engineer
	LPA Request
Changed Conditions	Public/Political Request
	Construction Related
	Environmental Related
	Materials Related
	R/W Related
	Soils Related
	Staging Related
Failed Materials	Utility Related

Incentive/Disincentive

Contract Completion
 Contract Payments
 Cost Reduction
 A+B Contract
 A+B+C Contract

Standards/Specifications Change

Completion Time
 Contract Payment
 Other

Final Quantity Adjustment

- **Errors and Omissions**—Change Orders are often required because contract documents include information which is incorrect or omits an element required to construct the overall contract in accordance with its original scope. Examples of errors include incorrect information regarding the status of right-of-way on the contract, a proposed grade change which cannot be constructed within the right-of-way or while maintaining traffic, or a quantity bust for a contract pay item. Examples of omissions include situations where the Department fails to obtain a permit which is required to construct a contract, the contract does not include a pay item which is necessary to construct the contract in accordance with its intended scope, and situations where it is discovered that a special provision intended for inclusion in the contract was not included for some reason. The Department is responsible for contract errors and omissions and the Contractor is entitled to consideration of monetary and time adjustments in these situations.
- **Scope Changes**—Scope changes are situations where the Department determines that it is necessary to either add items unrelated to the current scope to the contract, delete items related to a portion of the current overall scope of the contract, or increase or decrease the area over which the current contract scope will be constructed. Examples of scope changes include adding a sidewalk to a contract which currently does not include any, elimination of all lighting from a contract, and extending a proposed overlay 1,000 feet beyond the current contract limit. Scope changes are also the responsibility of the Department and consideration of monetary and time adjustments is warranted. Scope changes may not be implemented without the approval of the PM.
- **Changed Conditions**—Changed conditions are defined in Section 104.02 of the Standard Specifications. They include differing site conditions, suspension of work by the Department, and significant changes in the character of the work. Differing site conditions are the most common type of changed condition encountered in the field. In most situations, it is the Contractor that discovers a potential differing site condition and is required to provide notice prior to performing any work at the affected location. It is the Department's responsibility to verify whether the situation actually represents a differing site condition and if so, determine the required work to mitigate the problem. Examples of differing site conditions include the presence of an underground

storage tank that is not indicated on the plans, discovery of a peat deposit at a location where peat is not anticipated, and discovery of an existing concrete base under the asphalt surfaced pavement on a contract that includes no pay item for pavement removal. Suspensions of work included in 104.02 are related to suspensions directed by the Department for the benefit of the Department or the motoring public. Examples of these suspensions include those for holidays or community festivals not noted in the contract documents. Suspensions of work related to poor workmanship, contract breaches by the Contractor, or operational problems of the Contractor are not covered by 104.02. Significant changes in the character of the work may involve situations when work totally unrelated to the existing scope is added to a contract. However, the most common occurrence of significant changes in the character of the work is related to a major pay item that has its quantity increase or decrease by more than 25%. Typically, increases in quantity usually justify a lower unit price and reductions in quantity normally justify a higher unit price. Consideration for monetary and time adjustments is usually required when changed conditions are encountered on a contract.

- **Failed Materials**—Change orders are required when it has been discovered that failed materials have been incorporated into the work. In these situations, the Failed Materials Committee, or District Testing acting within guidelines developed by the FMC, will determine the appropriate credit due to the Department to mitigate the failed material provided by the Contractor. A Change Order is executed to facilitate the credit to the Department.
- **Incentive/Disincentive**—Occasionally Incentive/Disincentive language is included in contracts to provide financial motivation to a Contractor to complete work associated with a closure period, an intermediate completion date, or the contract completion date early. If such language is included in a contract, a Change Order is required to incorporate the additional compensation earned by the Contractor due to early completion of the required work or a credit to the Department resulting from late completion of the required work. Also, this reason code is used for Change Orders which are necessary to incorporate a Contractor submitted Cost Reduction Incentive, CRI, into a contract.
- **Standards/Specifications Change**—The Department may elect to incorporate a new standard detail or specifications change into a contract after it is let. In these situations, a Change Order is required to modify the contract to add the new standard detail or specification. There may be monetary or time adjustments associated with these types of Change Orders.
- **Final Quantity Adjustment**—This reason code is used on Change Orders which are required when the overruns or underruns for individual pay items result in monetary adjustments that exceed the thresholds included in the Change Order Policy. These are sometimes referred to as balancing Change Orders.

2.19.4 Non-Discretionary and Discretionary Change Orders

All Change Orders must be classified as either Non-Discretionary or Discretionary.

In general, a Non-Discretionary Change Order results from events that occur during the course of construction and must be executed to complete contract work in accordance

with its original scope. Typically, Non-Discretionary Change Orders will utilize the following reason codes:

- Errors and Omissions
- Changed Conditions
- Failed Material
- Incentive/Disincentive, if I/D language is included in the existing contract
- Final Quantity Adjustment

Common examples of Non-Discretionary Change Orders include:

- Change Orders that add work related to the removal of an underground storage tank not shown on the plans or included in another contract document, disposal of the tank contents, and backfill of the hole resulting from the tank removal.
- Change Orders associated with extra work required to avoid a utility facility not shown on the plans or described elsewhere in the contract documents.
- Change Orders required for documentation of a plan quantity error in an existing pay item.

In general, Discretionary Change Orders are those which result from events or intervention of parties that are outside of the normal construction or contract development process. Typically, Discretionary Change Orders will utilize one of the following reason codes:

- Scope Changes
- Incentive/Disincentive, if I/D language is established by the Change Order or if related to a Contractor submitted CRI
- Standards/Specifications Changes

Common examples of Discretionary Change Orders include the following:

- Change Orders that relocate a contract limit by 1,000 feet at the direction of the District Deputy Commissioner or LPA representative.
- Change Orders that change the permanent pavement marking material throughout the contract area from paint to thermoplastic at the direction of the District Traffic Office or LPA representative.
- Change Orders that are related to a Contractor submitted CRI.
- Change Orders that are required to revise a specification included in the existing contract.

Contact the AE if there are any questions regarding Non-Discretionary or Discretionary Change Order assignment. The Division of Construction Management Field Engineer assigned to the District is also available for guidance.

2.19.5 Change Order Approval Authority

The Change Order Policy assigns Department approval authority based on the magnitude of the overall monetary or time adjustment involved. If a Change Order includes both monetary and time adjustments, the approval authority is the higher authority required for approval of the monetary adjustment or time adjustment if considered separately.

The approval authority for a Change Order is based on the monetary adjustment and time adjustment associated with that document. The Change Order approval authority is based on the adjustments of each individual Change Order and is not cumulative throughout the Contract. It is possible for Change Order No. 1 to require State Construction Engineer approval while it would be appropriate to approve Change Order No. 2 at the PE/S level.

Work associated with a Change Order cannot begin until documented approval is provided by the approval authority. In addition to the Department approval authority, LPA documented approval is required for LPA contracts and FHWA documented approval is required on contracts with FHWA oversight.

The Change Order Policy also states that there are two situations which require the documented approval of the Director, Division of Construction Management in addition to the approval authority based on the magnitude of the monetary or time adjustment. The situations are described below:

- Change Orders which involve work on property, equipment, buildings or other items owned by the State of Indiana and not included in the original or modified contract.
- Change Orders which involve the purchase of equipment that will remain the property of the Department after completion of the contract.

The Change Order Policy also indicates that the approval authority for Change Orders which establish or delete intermediate completion dates, closure periods, etc. is the Director, Division of Construction Management.

2.19.6 Minor Existing Contract Pay Item Overruns and Underruns

The Change Order Policy allows for individual existing contract pay items to overrun or underrun without processing a Change Order if both of the following conditions are met:

- The overrun or underrun of the pay item does not result from a change in scope of the contract.
- The monetary adjustment associated with the overrun or underrun of the existing contract pay item is less than \$20,000.00.

If either of the above conditions is not met, it is necessary to execute a Change Order to document the monetary adjustment associated with the overrun or underrun of the existing contract pay item.

Once a Change Order is executed to document a monetary adjustment related to the overrun or underrun of an existing contract pay item, a subsequent Change Order is not required until an additional monetary adjustment of \$20,000.00 related to overruns or underruns of the pay item is achieved unless it is due to a change in contract scope.

2.19.7 Contract Scope/Design Element Change Orders

The Change Order Policy requires that Change Orders involving changes to the scope or design elements of a contract receive approval from the party responsible for the design element involved through the PM in addition to the Change Order's required approval authority. This is necessary to ensure that contract specific design criteria or Department

commitments made prior to construction are not changed without the input of personnel familiar with these issues. The Change Order Policy lists several such items which are considered changes in scope or design elements.

2.19.8 Determination of Required Change Order Work/Work Order Issuance

For situations when the Contractor is delayed due to a changed condition in accordance with Section 104.02 of the Standard Specifications or other issue for which the Department is responsible, it is the Department's first priority to authorize the Contractor to perform the work associated with the required Change Order. A Work Order is used to authorize a Contractor to perform work associated with a Change Order prior to full execution of the official document.

Prior to issuing a Work Order, the following steps are required once it is determined that a Change Order is required:

- **Notify AE of Need for Change Order**—The AE needs to be notified of the situation that requires a Change Order. Discuss the situation with the AE to determine if the work associated the Change Order can be determined at the project level with input from the Contractor or if it will be necessary to enlist the assistance of the PM to contact the appropriate parties to determine the required work.
- **Notify PM of Need for Change Order**—In order to manage the project and ensure that any necessary additional funding is provided for the contract, the PM must be notified when Change Order situations occur. The notification should also include the results of the discussions with the AE regarding where the work associated with the Change Order will be determined—at the project level or with the assistance of the PM. If the Change Order work will be determined at the project level, keep the PM posted as the scope is developed and finalized.

In situations where the work associated with the Change Order cannot be determined at the project level and the Change Order is necessary due to a design error or omission made by a consultant designer, insist that the PM contact the consultant designer for input regarding the required Change Order work. If the consultant designer is not involved in developing the Change Order work to mitigate a design error or omission, it may affect the Department's ability to seek reimbursement from the consultant designer for the additional costs incurred due to the error or omission.

- **Determine Work Elements Included in Change Order**—If it has been decided that the Change Order work can be determined at the project level, communicate with the Contractor as appropriate to determine the required mitigation work. Once the Change Order work is determined at the project level, forward the details to the PM and AE. If it is determined that the Change Order work cannot be determined at the project level or it is found to involve a scope change or design element change as defined by the Change Order Policy, notify the PM to request assistance with determination of the required mitigation work. After this coordination is complete, the PM will make a recommendation regarding the proposed Change Order work to the PE/S. Coordinate with the AE and PM to ensure that the Change Order work is determined in a timely manner.

- **Review Contractor Submittals**—After the Change Order work is determined, request the Contractor to submit proposed unit prices for all new pay items and proposed contract time adjustments, if required. Review the Contractor's proposals utilizing available bid history and operation production data. Bid history data is available on the INDOT Intranet and operation production data is available at the District Office. Consult the AE and the Division of Construction Management Field Engineer assigned to the District if assistance in evaluation of this data is required. Generate hard copies of all documents used in the review of Contractor proposed new pay item unit prices as well as time adjustments and maintain these documents along with related notes in a cost analysis file in the field office. If the Contractor's proposals are determined to be reasonable based on comparison to bid history or operation production data, no additional information is required from the Contractor. If the Contractor proposed unit prices or time adjustments do not appear to be consistent with the historical data, contact the Contractor and request backup information to justify the proposed unit prices or time adjustments. Backup unit price information should include breakdowns for labor, equipment, materials, etc. Scheduling information should be provided to justify any requested time adjustments that are not consistent with historical data. Maintain Contractor provided backup data in the above noted cost analysis file in the field office. Review the requested time adjustment in accordance with Section 105.16 of Standard Specifications.
- **Determine the Change Order Monetary and Time Adjustments**—Once the Change Order work is determined and all required Contractor submittals are approved, it is necessary to determine the monetary and time adjustments associated with the work. For work covered by existing contract pay items, the monetary adjustment is based on the existing contract unit prices and the proposed Change Order quantities. For work associated with new pay items, the monetary adjustment is based on the proposed estimated quantities and associated unit prices. If any of the Change Order work will be performed as a force account, estimate the monetary adjustment associated with the force account. Incorporation of this force account estimate into the resulting Change Order will allow the Contractor to be paid for force account work as soon as it is performed after Change Order approval. If the actual force account costs exceed the estimate, a subsequent Change Order can be processed to cover the excess costs.

If the Contractor's proposed time adjustments apply to closure periods, intermediate completion dates, incentive/disincentive dates, etc. as well as the contract completion date, for approval purposes the requested time adjustment is the maximum duration. For example, if a Contractor requests time adjustments of 10 days to Intermediate Completion Date 1, 15 days to Intermediate Completion Date 2, 15 days to Intermediate Completion Date 3, and 15 days to the Contract Completion Date, the magnitude of the time extension request is 15 days.

For situations where a time adjustment is necessary to mitigate a delay which is the Department's responsibility and the mitigation results in application of a portion of the adjustment prior to December 1 and the remainder is applied after March 31 in accordance with the Standard Specifications, the magnitude of the

time adjustment is the number of calendar days that the intermediate completion or contract completion date was shifted, including the period starting December 1 and ending March 31. For example, if a thirty day Department responsible delay was experienced on a contract with an intermediate completion date of November 15 and the Standard Specifications permit the exclusion of the period beginning on December 1 and ending on March 31, the remaining fifteen days of the adjustment would be applied from April 1 to April 15. In this situation, the time adjustment requiring approval would be 151 calendar days, or 152 calendar days if a leap year is involved.

- **Obtain Documented Approval**—After the monetary and time adjustments for the Change Order are determined, refer to the Change Order Policy to determine the required approval authority for the Department. In addition, obtain documented approval from representatives of the LPA or FHWA, if applicable, prior to issuing the Work Order directing the Contractor to perform the Change Order work.

If the PE/S is the Department approval authority and all required outside agency documented approvals have been obtained, issue a Work Order to direct the Contractor to perform the Change Order work.

If the required Department approval authority is above the PE/S level, forward information related to the required Change Order work; the recommended monetary adjustment amount including all affected pay items, quantities, and unit prices; and the recommended time adjustment to the AE via e-mail. Include information related to how the recommended monetary and time adjustments were determined to be appropriate for the proposed scope of work—i.e. review of bid history, schedule information, backup information provided, etc. Attach backup documentation provided by the Contractor to the e-mail so it can be referenced by the approval authority. If the approval authority is above the AE level, the AE will review the packet prior to sending it to the DCD, and the process will be repeated up the Department approval chain of command until reaching the approval authority. Each individual in the approval chain of command should indicate his or her concurrence with the recommendations until it reaches the approval authority. This will ensure that everyone who will be involved in the Change Order approval process is informed regarding the situation and supports the recommended solution.

The Department approval authority will review the forwarded packet. If it is acceptable, the approval authority will provide the PE/S with documented approval of the Change Order via e-mail. After receiving Department as well as LPA and FHWA approval via e-mail, if applicable, direct the Contractor in writing via a Work Order to begin Change Order work. If additional information is required prior to Change Order approval, the approval authority will notify the PE/S and copy all in the approval chain via e-mail of the desired additional information. Provide the desired information to the approval authority via e-mail and copy all in the chain of command below the approval authority.